A first look at inverses Name:

1. Graph the following.

y=2x+1

|  |  |
| --- | --- |
| **x** | **y** |
| -3 |  |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |

Is it a function?



Now find the inverse.

|  |  |
| --- | --- |
| **x** | **y** |
|  | -3 |
|  | -2 |
|  | -1 |
|  | 0 |
|  | 1 |
|  | 2 |
|  | 3 |

Is it a function?

1. Graph the following.

y= (1/2)x+5

|  |  |
| --- | --- |
| **x** | **y** |
| -3 |  |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |

Is it a function?

Now find the inverse.

|  |  |
| --- | --- |
| **x** | **y** |
|  | -3 |
|  | -2 |
|  | -1 |
|  | 0 |
|  | 1 |
|  | 2 |
|  | 3 |

Is it a function?

1. Graph the following.

y=x2

|  |  |
| --- | --- |
| **x** | **y** |
| -3 |  |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |

Is it a function?

Now find the inverse.

|  |  |
| --- | --- |
| **x** | **y** |
|  | -3 |
|  | -2 |
|  | -1 |
|  | 0 |
|  | 1 |
|  | 2 |
|  | 3 |

Is it a function?

1. Graph the following.

y=√x

|  |  |
| --- | --- |
| **x** | **y** |
| -3 |  |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |

Is it a function?

Now find the inverse.

|  |  |
| --- | --- |
| **x** | **y** |
|  | -3 |
|  | -2 |
|  | -1 |
|  | 0 |
|  | 1 |
|  | 2 |
|  | 3 |

Is it a function?

1. Graph the following.

y=1/x

|  |  |
| --- | --- |
| **x** | **y** |
| -3 |  |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |

Is it a function?

Now find the inverse.

|  |  |
| --- | --- |
| **x** | **y** |
|  | -3 |
|  | -2 |
|  | -1 |
|  | 0 |
|  | 1 |
|  | 2 |
|  | 3 |

Is it a function?

1. Graph the following.

y=x3

|  |  |
| --- | --- |
| **x** | **y** |
| -3 |  |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |

Is it a function?

Now find the inverse.

|  |  |
| --- | --- |
| **x** | **y** |
|  | -3 |
|  | -2 |
|  | -1 |
|  | 0 |
|  | 1 |
|  | 2 |
|  | 3 |

Is it a function?